

CLAIMS

Having thus described our invention, what we claim as new, and desire to secure the Letters Patent is:

1 1. A system for tracking and backing all the information
2 that a user generates on computer devices, (including
3 embedded devices, in real time, the system comprising:

4
5 a local server to record all user actions and gestures;
6 and

7
8 means for sending all of this information to a remote
9 server via the Internet for backup.

1 2. The system as in claim 1, where the remote server has
2 a virtual map of all the embedded devices on a computer
3 that the person uses, and the remote server interprets
4 the user's actions, including user gestures.

1 3. The system as in claim 2, wherein the system stores
2 user actions that are related to data generation (e.g.,
3 actions that called some links where data is stored, or
4 executed some programs that generated data).

.1 4. The system as in claim 2, wherein the remote server
2 generates and downloads the same files that are
3 downloaded on the local user computer devices.

1 5. The system as in claim 1, where the devices are a
2 telephone, a computer, a watch, a recorder, and a

3 calculator, and the user performs various actions on the
4 devices around the user.

1 6. The system as in claim 5, where the user's actions
2 are stored in a database of user actions, the user's
3 actions are interpreted by a translator server, the
4 translator interprets which actions made by the user
5 actually change the database, and this information is
6 sent to a backup server, where it is decided what should
7 be saved.

1 7. The system as in claim 6, where the backup server
2 also downloads files that were downloaded by the user.

1 8. The system as in claim 7, where, in some cases, a user
2 may generate new data by using a program, the translator
3 of user's action would understand that in order to obtain
4 certain data it needs executables.

1 9. The system as in claim 8, wherein the translator may
2 require that some executables need to be downloaded in
3 order for the server to be able to keep up with the
4 user's actions, and wherein if the user has a program
5 that can generate new data, the server would download the
6 same program and enter the same commands as the user did.

1 10. A system according to Claim 1, wherein, the data base
2 of user actions is organized as follows: the start and
3 finish of the time alignment is recorded under one
4 column. another column contains the list of devices that
5 user actions were performed on, the form of media used to
6 control these devices is located under another column,

7 changes in the devices are recorded under a next column,
8 correlation, a next column gives the names of users for
9 each device, a next column lists the location of each
10 device, and a next column lists the environment of each
11 place+.

1 11. A media identifier comprising:
2
3 a first, media identifier module interprets what form of
4 media a person used to perform a function;
5
6 a second module to tell the difference between a command
7 or a data generation identification, wherein after the
8 data is sent through the first module, the data are sent
9 to the second module where the commands are interpreted,
10 and wherein if the data are identified as data that
11 generates new data, the data are labeled in a third, data
12 labeler module; wherein the data labeler labels data
13 according to whether they have a link or not; if the data
14 has a link, the data are processed as a link data;
15
16 a fourth, link module for connecting commands with data.
17 For example, if certain data was found using a link; and
18
19 a fifth module for listing the addresses of the links
20 that need to be used to get data.

1 12. A procedure for command vs. data generation
2 identification, comprising:
3
4 receiving input labels;
5

6 interpreting media used by a user;
7
8 representing the form of media that the data are in when
9 the data are received into a backup server;
10
11 if data are gesture generated, then determining if the
12 data are related or unrelated to data generation;
13
14 verifying text to be a command or not, including the
15 steps of
16
17 i) sending the text through a command verifier, and
18
19 ii) determining if the text is a command or not;
20
21 separating data that is a command from data that is not a
22 command;
23
24 if the data is a command, interpreting the data; and
25
26 if the data is not a command, storing the data.

1 13. A method for handling data in a real-time back up
2 system, comprising:
3
4 performing a regular back up; and
5
6 determining whether data should be removed or not by the
7 following circumstances: how old the data are, if there
8 are newer versions of this data, and how often the data
9 are being used; wherein the only condition where a file

10 cannot be removed is where another database has a link to
11 a file that another database needs.

1 14. A method of establishing a database of programs,
2 comprising the steps:

3 listing in a first column the programs used;

4

5 listing in a second column the names of the users for
6 each program;

7

8 using a third column for keeping track of the time for
9 generation of data and changes;

10

11 also using the third column for keeping track of data
12 history;

13

14 listing in a fourth column commands used to control
15 programs;

16

17 listing in a fifth column the operating system used to
18 hold data;

19

20 listing in a sixth column the devices that were used by
21 programs;

22

23 listing in a seventh column the sources that were used to
24 obtain data; and

25

26 using an eighth column as an index showing where data is
27 to be stored.

1 15. A method of using a database to explain the history
2 of user's actions, comprising the steps:
3
4 using a first column to records the actions that are
5 inputted to control a program, wherein each action fits
6 under a designated class;
7
8 showing in a second column the class in which each action
9 is placed;
10
11 using a third column to keep a count of how often a class
12 is formed by similar actions;
13
14 if the actions fall into a class, automatically
15 withdrawing the actions from the input column;
16
17 using a fourth column to create a tree of the order of
18 actions that took place when a program was being used;
19 and
20
21 using a fifth column for placing an index to a file from
22 the tree index.

1 16. A method of operating a real-time data backup system,
2 comprising the steps:
3
4 recording a user's actions;
5
6 identifying the actions;
7
8 interpreting the user actions are interpreted in a user
9 media recognizor;

10
11 labeling actions as commands or data generators;
12
13 labeling commands that are related to data generation;
14
15 storing data;
16
17 storing links to data programs and commands that generate
18 data; and
19
20 removing data and links if predefined conditions are
21 satisfied.

1 17. A program storage device readable by machine,
2 tangibly embodying a program of instructions executable
3 by the machine to perform method steps for operating a
4 real-time data backup system, the method steps
5 comprising:
6
7 recording a user's actions;
8
9 identifying the actions;
10
11 interpreting the user actions are interpreted in a user
12 media recognizor;
13
14 labeling actions as commands or data generators;
15
16 labeling commands that are related to data generation;
17
18 storing data;
19

20 storing links to data programs and commands that generate
21 data; and
22
23 removing data and links if predefined conditions are
24 satisfied.

1 18. A program storage device according to Claim 17,
2 wherein the removing step includes the step of
3 determining whether data should be removed or not by the
4 following circumstances: how old the data are, if there
5 are newer versions of this data, and how often the data
6 are being used; wherein the only condition where a file
7 cannot be removed is where another database has a link to
8 a file that another database needs.